

# Snabbguide

Skicka och ta emot data med Cosmos DB och  
Azure Functions

# Visual Studio 2019

## Open recent

As you use Visual Studio, any projects, folders, or files that you open will show up here for quick access

You can pin anything that you open frequently so that it's always at the top of the list.

## Get started



### Clone a repository

Get code from an online repository like GitHub or Azure DevOps



### Open a project or solution

Open a local Visual Studio project or .sln file



### Open a local folder

Navigate and edit code within any folder



### Create a new project

Choose a project template with code scaffolding to get started

[Continue without code →](#)

# Create a new project

The screenshot shows the 'Create a new project' dialog in Visual Studio. At the top, there is a search bar containing the text 'azure functions'. Below the search bar, there are three dropdown menus: 'C#' (selected), 'All platforms', and 'All project types'. On the right side of the dialog, there is a 'Clear all' link.

The main area displays a list of project templates:

- ASP.NET Core Web Application (C#)
- Azure Functions (C#) - This template is highlighted with a red oval. It is described as a 'template to create an Azure Function project' and is categorized under 'Azure', 'Cloud', and 'C#'.

Azure Functions  
A template to create an Azure Function project.  
Azure Cloud Service (classic)  
A project for creating a scalable service that runs on Microsoft Azure.
- xUnit Test Project (.NET Core) (C#)
- MSTest Test Project (.NET Core) (C#)
- Blazor App (C#)
- Blank App (Universal Windows) (C#)
- Console App (.NET Core) (C#)
- Windows Forms App (.NET Framework) (C#)
- ASP.NET Web Application (.NET Framework) (C#)
- Analysis Services Multidimensional and Data Mining Project

At the bottom right of the dialog, there are two buttons: 'Back' and 'Next'. The 'Next' button is highlighted with a red oval.

# Configure your new project

Azure Functions   Azure   Cloud   C#

Project name

Location

Solution name ?

Place solution and project in the same directory

Back Create





# Create a new Azure Functions application

Azure Functions v3 (.NET Core)



## Empty

Creates an Azure Function project with no triggers. Function triggers can be added during development.



## Blob trigger

A C# function that will be run whenever a blob is added to a specified container.



## Cosmos DB Trigger

A C# function that will be run whenever documents change in a document collection.



## Event Grid trigger

A C# function that will be run whenever an event grid receives a new event



## Event Hub trigger

A C# function that will be run whenever an event hub receives a new event



## Http trigger

A C# function that will be run whenever it receives an HTTP request

[Get started with Azure Functions](#)

Storage account (AzureWebJobsStorage)

Storage emulator

None

Storage emulator

[Browse...](#)



Back

Create

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# Create

Azure Storage  
Select existing or create new

Subscription  
Microsoft Partner Network

Name	Resource group	Location
storageaccountrgroup190	RGROUP	West Europe

+ Create a storage account

Add Refresh Cancel Create

x

ge account.

Create

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# Create a new Azure Functions application

Azure Functions v3 (.NET Core)



## Empty

Creates an Azure Function project with no triggers. Function triggers can be added during development.



## Blob trigger

A C# function that will be run whenever a blob is added to a specified container.



## Cosmos DB Trigger

A C# function that will be run whenever documents change in a document collection.



## Event Grid trigger

A C# function that will be run whenever an event grid receives a new event



## Event Hub trigger

A C# function that will be run whenever an event hub receives a new event



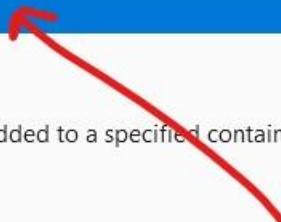
## Http trigger

A C# function that will be run whenever it receives an HTTP request

[Get started with Azure Functions](#)

Storage account (AzureWebJobsStorage)

storageaccountrgroub190

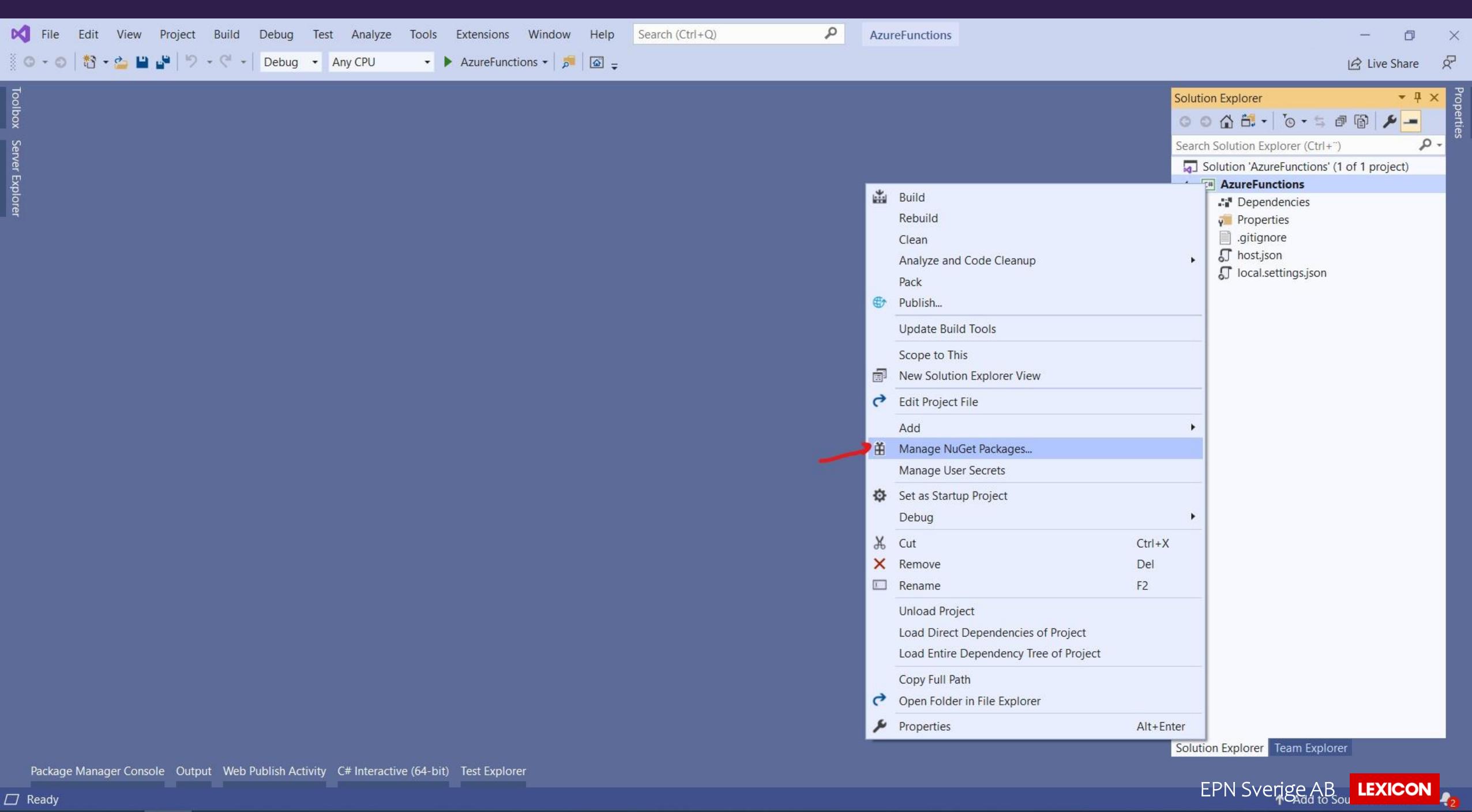


Back

Create

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Screenshot of the Microsoft Visual Studio IDE showing the NuGet Package Manager interface for the AzureFunctions project.

The top navigation bar includes File, Edit, View, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help, Search (Ctrl+Q), and AzureFunctions.

The Solution Explorer shows a single project named "AzureFunctions".

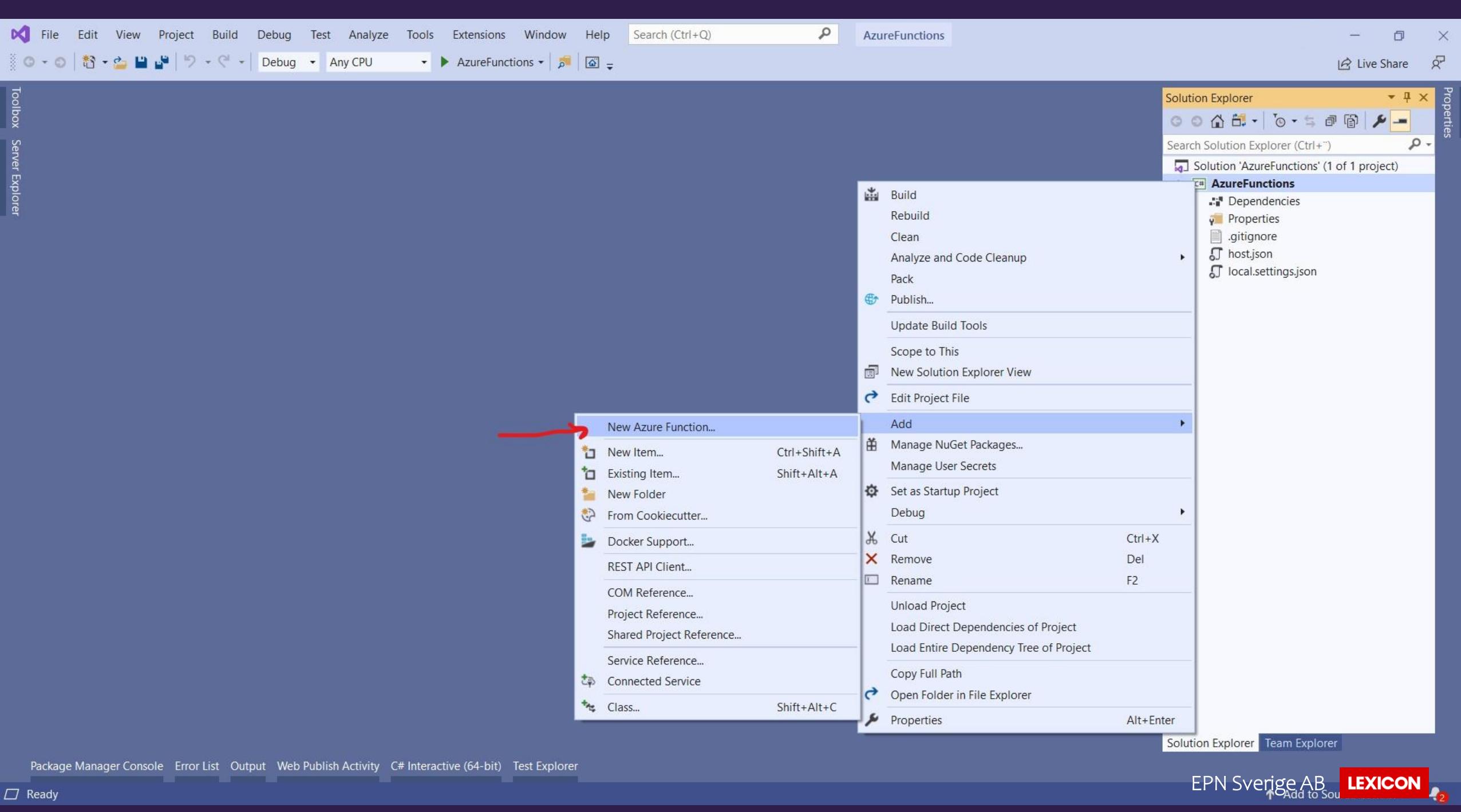
The NuGet Package Manager window displays the results for the search term "Microsoft.Azure.WebJobs.Extensions.CosmosDB". The results include:

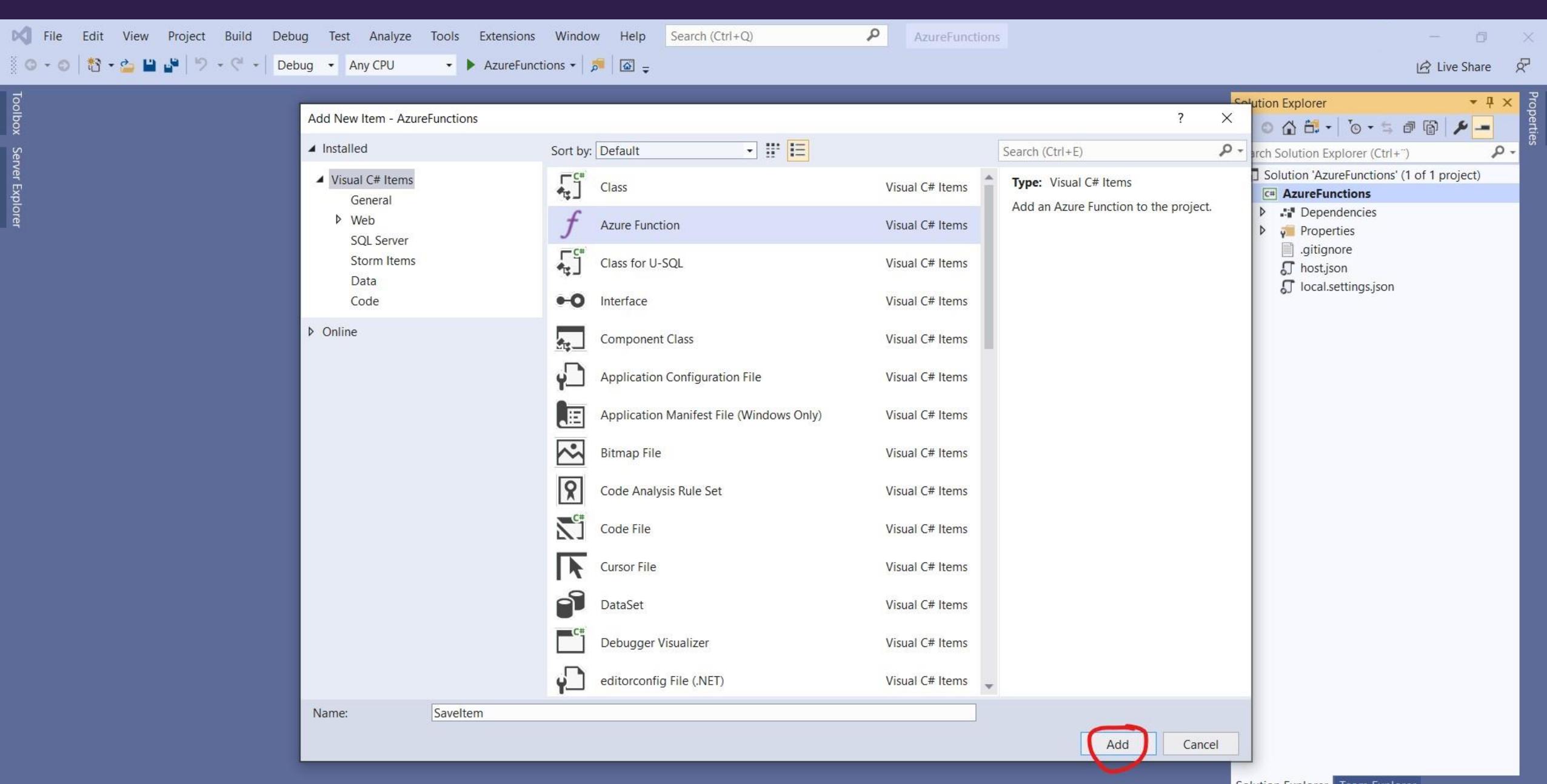
- Microsoft.Azure.WebJobs.Extensions.CosmosDB** by Microsoft, 1,24M downloads, Version v3.0.7. Description: This package contains binding extensions for Azure Cosmos DB. An arrow points from this item to the "Install" button on the right.
- Microsoft.Azure.WebJobs** by Microsoft, 36,9M downloads, Version v3.0.16. Description: This package contains the runtime assemblies for Microsoft.Azure.WebJobs.Host. It also adds rich diagnostics capabilities which makes it easier to monitor the WebJobs in the dashboard. For more information, please visit h...
- Microsoft.Azure.WebJobs.Extensions** by Microsoft, 18,4M downloads, Version v3.0.6. Description: This package contains Timers and File triggers. For more information, please visit https://azure.microsoft.com/en-us/documentation/articles/websites-webjobs-resources.
- Microsoft.Azure.WebJobs.Core** by Microsoft, 37,4M downloads, Version v3.0.16. Description: This library simplifies the task of adding background processing to your Microsoft Azure Web Sites. The SDK uses Microsoft Azure Storage, triggering a function in your program when items are added to Queues and Blobs. A d...
- Microsoft.Azure.WebJobs.Extensions.Http** by Microsoft, 13,4M downloads, Version v3.0.2. Description: This package adds binding extensions for Http.
- Microsoft.Extensions.WebEncoders** by Microsoft, 116M downloads, Version v5.0.0-preview.6.20312.15. Description: Contains registration and configuration APIs to add the core framework encoders to a dependency injection container. Prerelease.
- Microsoft.Extensions.Primitives** by Microsoft, 390M downloads, Version v5.0.0-preview.6.20305.6. Description: Primitives shared by framework extensions. Commonly used types include: Prerelease.
- Microsoft.Extensions.Logging.Abstractions** by Microsoft, 361M downloads, Version v5.0.0-preview.6.20305.6. Description: Logging abstractions for Microsoft.Extensions.Logging. Prerelease.

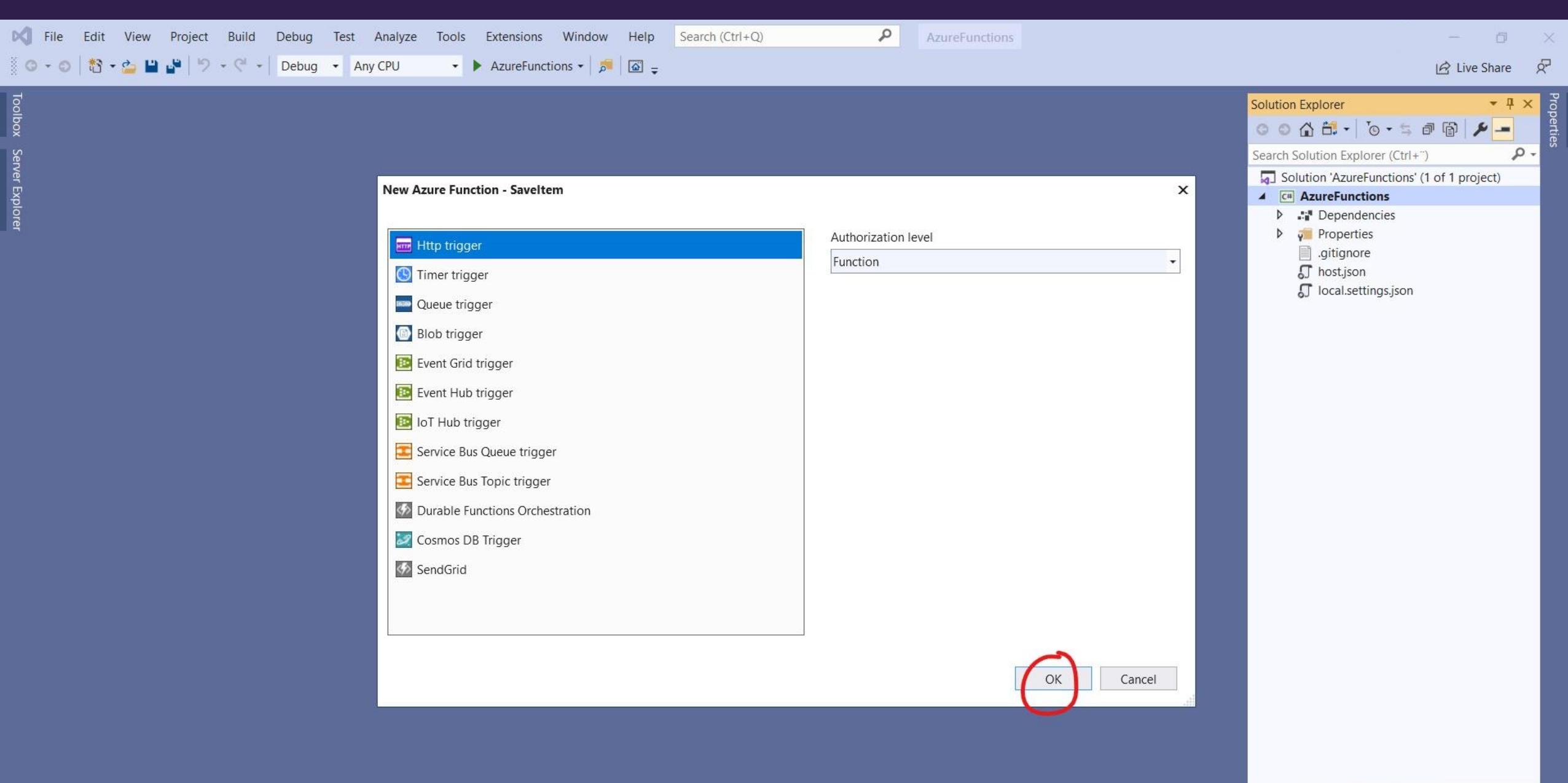
The right pane shows the details for the selected package, **Microsoft.Azure.WebJobs.Extensions.CosmosDB**, version 3.0.7. The "Install" button is highlighted with a red circle.

Bottom navigation includes Package Manager Console, Output, Web Publish Activity, C# Interactive (64-bit), Test Explorer, Solution Explorer, and Team Explorer.

Bottom status bar: Ready.







Solution Explorer Team Explorer

Package Manager Console Error List Output Web Publish Activity C# Interactive (64-bit) Test Explorer

Ready

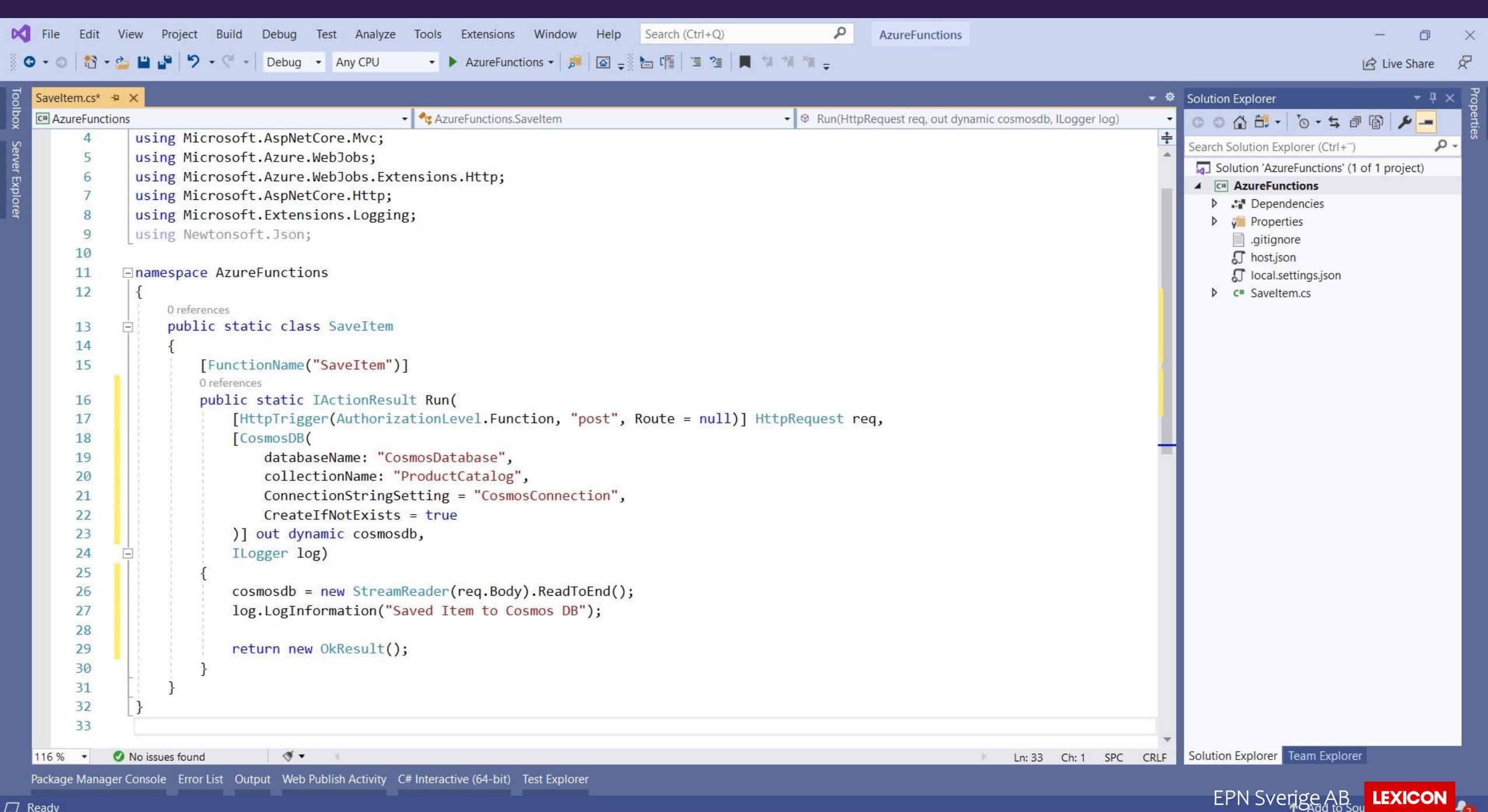
EPN Sverige AB LEXICON Add to Sou 2

The screenshot shows the Microsoft Visual Studio IDE interface with the following details:

- File Menu:** File, Edit, View, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help.
- Search Bar:** Search (Ctrl+Q).
- Solution Explorer:** Shows the solution 'AzureFunctions' (1 of 1 project) with files: Dependencies, Properties, .gitignore, host.json, local.settings.json, and Savelitem.cs.
- Properties View:** Standard properties icons for the selected file.
- Code Editor:** The file Savelitem.cs contains the following C# code for an Azure Function:

```
4  using Microsoft.AspNetCore.Mvc;
5  using Microsoft.Azure.WebJobs;
6  using Microsoft.Azure.WebJobs.Extensions.Http;
7  using Microsoft.AspNetCore.Http;
8  using Microsoft.Extensions.Logging;
9  using Newtonsoft.Json;
10 
11 namespace AzureFunctions
12 {
13     public static class SaveItem
14     {
15         [FunctionName("SaveItem")]
16         public static async Task<IActionResult> Run(
17             [HttpTrigger(AuthorizationLevel.Function, "get", "post", Route = null)] HttpRequest req,
18             ILogger log)
19         {
20             log.LogInformation("C# HTTP trigger function processed a request.");
21 
22             string name = req.Query["name"];
23 
24             string requestBody = await new StreamReader(req.Body).ReadToEndAsync();
25             dynamic data = JsonConvert.DeserializeObject(requestBody);
26             name = name ?? data?.name;
27 
28             string responseMessage = string.IsNullOrEmpty(name)
29                 ? "This HTTP triggered function executed successfully. Pass a name in the query string or in the request body f"
30                 : $"Hello, {name}. This HTTP triggered function executed successfully.";
31 
32             return new OkObjectResult(responseMessage);
33         }
34     }
}
```

A large red 'X' is drawn across the entire code block, starting from the first line and ending at the final closing brace of the class definition. The status bar at the bottom left indicates "No issues found".



Screenshot of the Microsoft Visual Studio IDE interface showing the context menu for a project named "AzureFunctions".

The menu is open at the bottom right of the screen, displaying various options for managing the project:

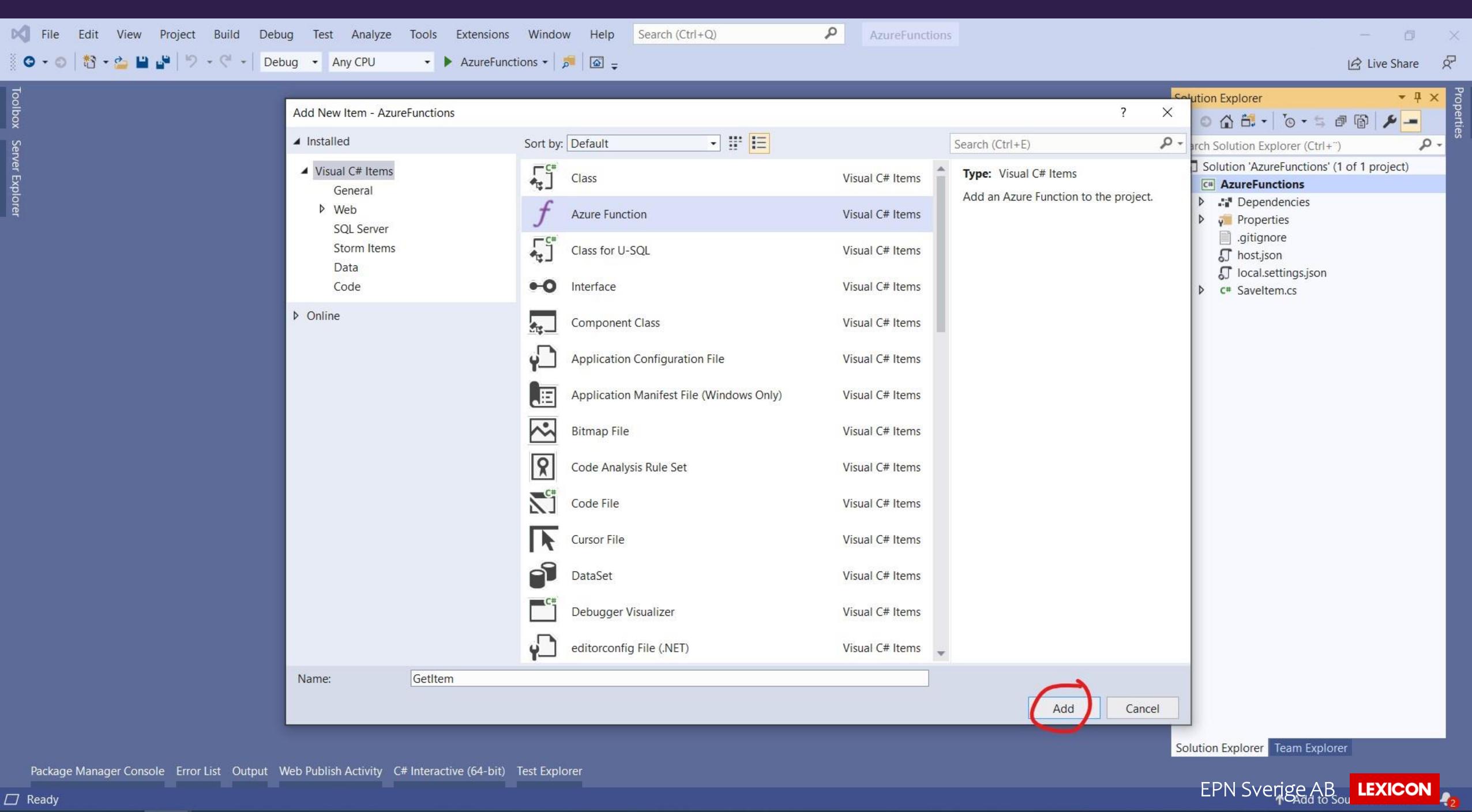
- New Azure Function...**
- Add** (selected):
  - New Item... (Ctrl+Shift+A)
  - Existing Item... (Shift+Alt+A)
  - New Folder
  - From Cookiecutter...
  - Docker Support...
  - REST API Client...
  - COM Reference...
  - Project Reference...
  - Shared Project Reference...
  - Service Reference...
  - Connected Service
  - Class... (Shift+Alt+C)
- Build:
  - Build
  - Rebuild
  - Clean
  - Analyze and Code Cleanup
  - Pack
- Publish... (disabled)
- Update Build Tools
- Scope to This
- New Solution Explorer View
- Edit Project File
- Manage NuGet Packages...
- Manage User Secrets
- Set as Startup Project
- Debug
- Cut (Ctrl+X)
- Remove (Del)
- Rename (F2)
- Unload Project
- Load Direct Dependencies of Project
- Load Entire Dependency Tree of Project
- Copy Full Path
- Open Folder in File Explorer
- Properties (Alt+Enter)

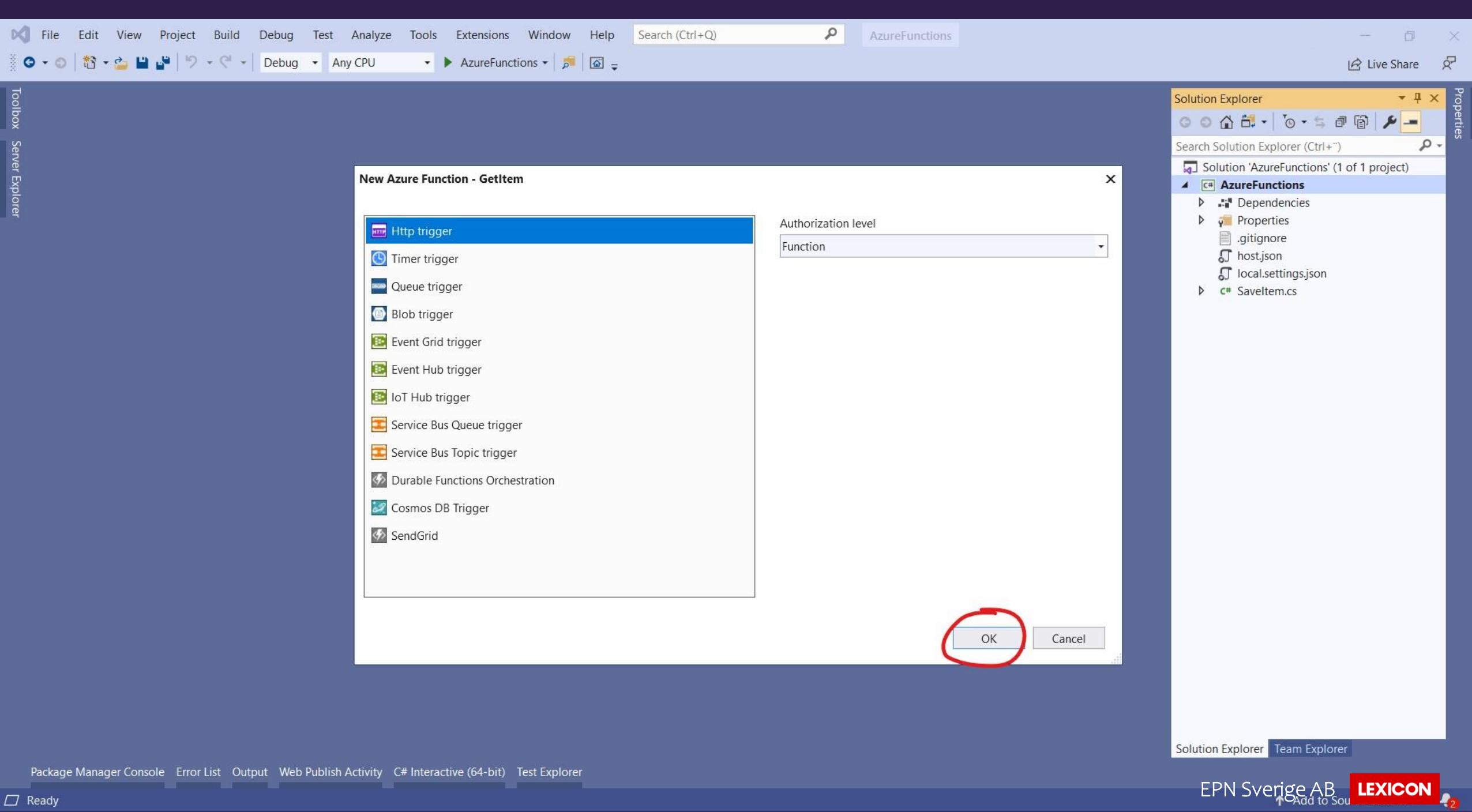
The "Solution Explorer" tab is selected at the bottom right.

Other visible tabs include "Team Explorer" and "Properties".

At the bottom left, there are links for "Package Manager Console", "Error List", "Output", "Web Publish Activity", "C# Interactive (64-bit)", and "Test Explorer".

At the bottom right, there are logos for "EPN Sverige AB" and "LEXICON".





Solution Explorer | Team Explorer

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Add to Sou

File Edit View Project Build Debug Test Analyze Tools Extensions Window Help Search (Ctrl+Q) AzureFunctions

Live Share

GetItem.cs

C# AzureFunctions

```
7  using Microsoft.AspNetCore.Http;
8  using Microsoft.Extensions.Logging;
9  using Newtonsoft.Json;
10 
11 namespace AzureFunctions
12 {
13     public static class GetItem
14     {
15         [FunctionName("GetItem")]
16         public static async Task<IActionResult> Run(
17             [HttpTrigger(AuthorizationLevel.Function, "get", "post", Route = null)] HttpRequest req,
18             ILogger log)
19         {
20             log.LogInformation("C# HTTP trigger function processed a request.");
21 
22             string name = req.Query["name"];
23 
24             string requestBody = await new StreamReader(req.Body).ReadToEndAsync();
25             dynamic data = JsonConvert.DeserializeObject(requestBody);
26             name = name ?? data?.name;
27 
28             string responseMessage = string.IsNullOrEmpty(name)
29                 ? "This HTTP triggered function executed successfully. Pass a name in the query string or in the request body f
30                 : $"Hello, {name}. This HTTP triggered function executed successfully.";
31 
32             return new OkObjectResult(responseMessage);
33         }
34     }
35 }
36 
```

Run(HttpContext req, ILogger log)

Solution Explorer

Properties

Search Solution Explorer (Ctrl+F)

Solution 'AzureFunctions' (1 of 1 project)

- Dependencies
- Properties
- .gitignore
- GetItem.cs
- host.json
- local.settings.json
- Saveltem.cs

Toolbox

Server Explorer

116 % No issues found

Ln: 20 Ch: 1 SPC CRLF

Solution Explorer Team Explorer

Package Manager Console Error List Output Web Publish Activity C# Interactive (64-bit) Test Explorer

Ready

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A screenshot of the Microsoft Visual Studio IDE interface, specifically for an Azure Functions project named "AzureFunctions".

The top menu bar includes: File, Edit, View, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help, Search (Ctrl+Q), and AzureFunctions.

The toolbar contains icons for file operations like Open, Save, and Print, along with tabs for Debug, Any CPU, and AzureFunctions.

The Solution Explorer on the right shows the project structure:

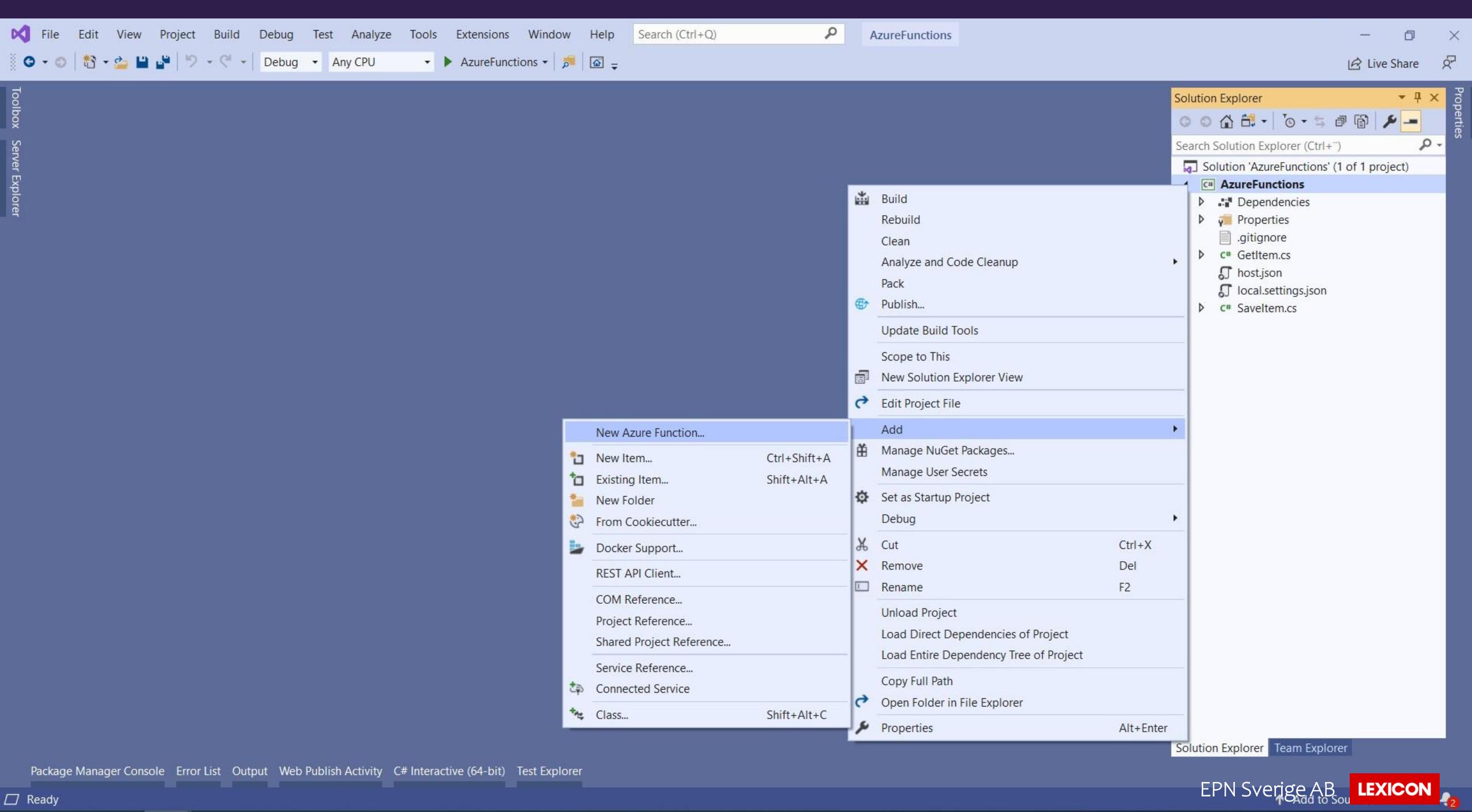
- Solution 'AzureFunctions' (1 of 1 project)
  - Dependencies
  - Properties
    - .gitignore
  - GetItem.cs (selected)
  - host.json
  - local.settings.json
  - Savelitem.cs

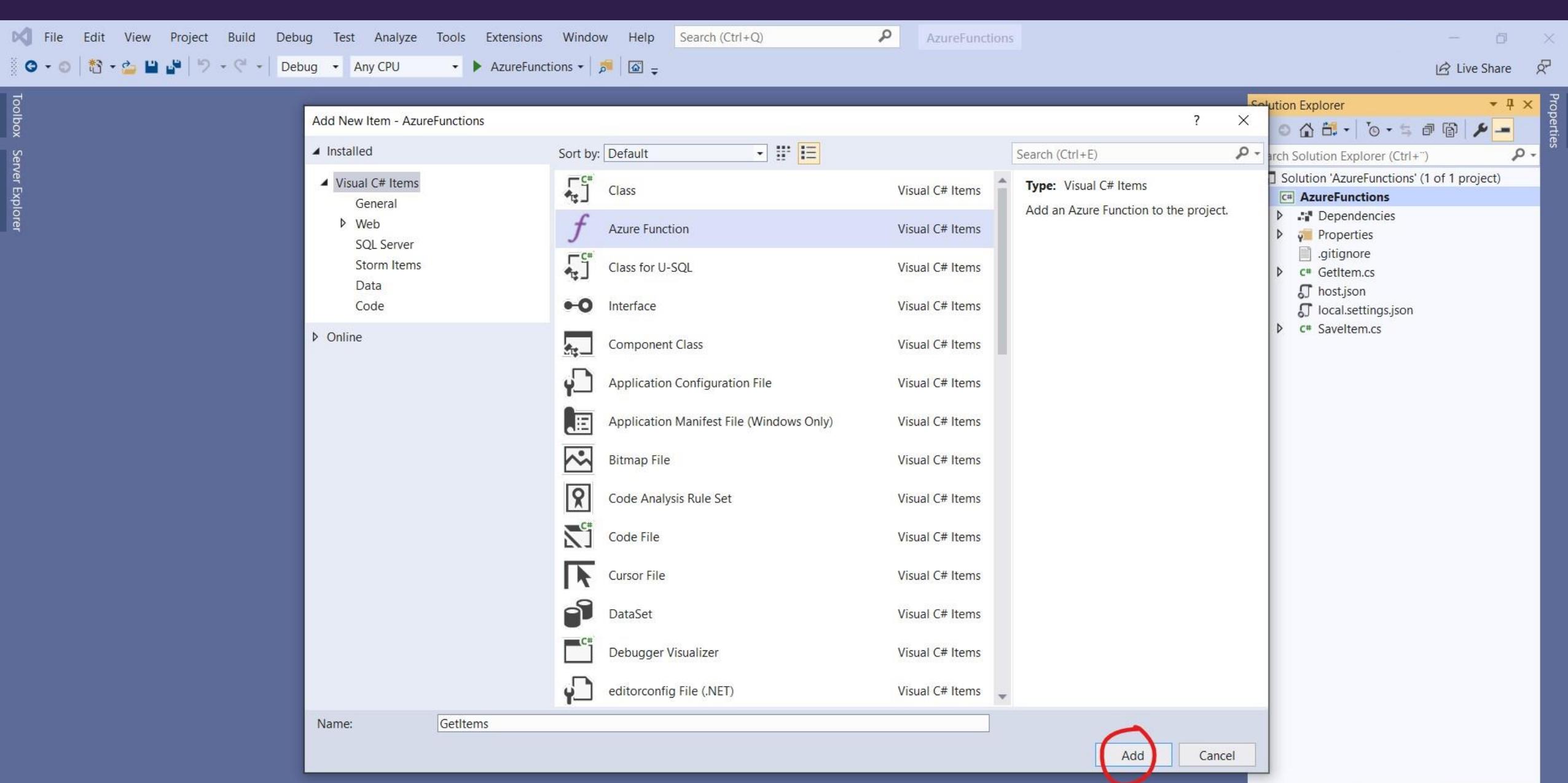
The main code editor displays the C# code for the GetItem function:

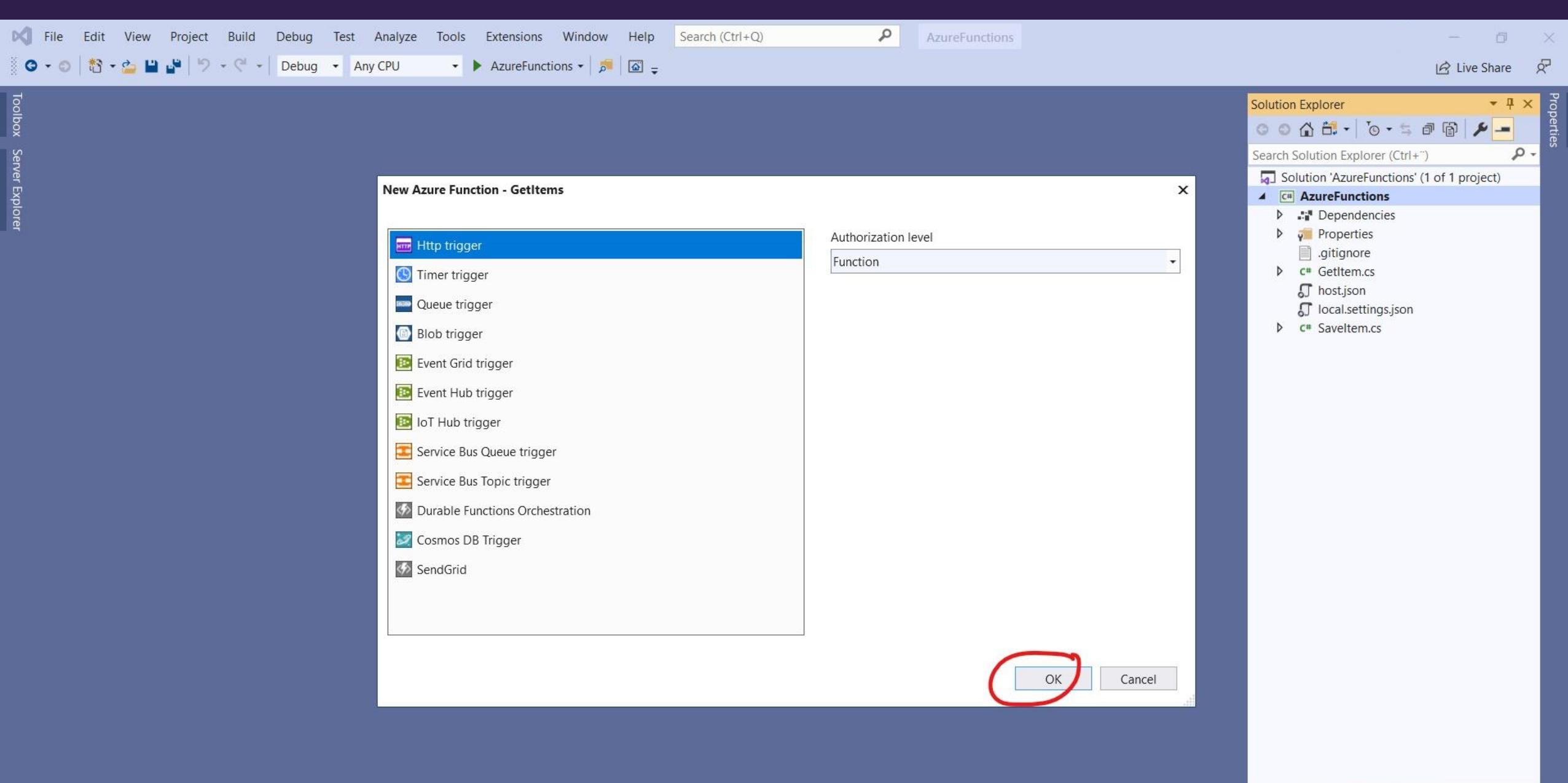
```
GetItem.cs*  ▾ x
c# AzureFunctions
using Newtonsoft.Json;
namespace AzureFunctions
{
    public static class GetItem
    {
        [FunctionName("GetItem")]
        public static async Task<IActionResult> Run(
            [HttpTrigger(AuthorizationLevel.Function, "get", Route = null)] HttpRequest req,
            [CosmosDB(
                databaseName: "CosmosDatabase",
                collectionName: "ProductCatalog",
                ConnectionStringSetting = "CosmosConnection",
                CreateIfNotExists = true,
                Id = "{Query.id}"
            )] dynamic cosmosdb,
            ILogger log)
        {
            if (cosmosdb == null)
            {
                log.LogInformation($"Requested item not found");
                return new NotFoundResult();
            }

            log.LogInformation($"Requested item found");
            return new OkObjectResult(cosmosdb);
        }
    }
}
```

The status bar at the bottom shows: Ln: 39 Ch: 1 SPC CRLF, and the bottom navigation bar includes: Package Manager Console, Error List, Output, Web Publish Activity, C# Interactive (64-bit), Test Explorer, Solution Explorer, Team Explorer, and a Ready indicator.







The screenshot shows the Microsoft Visual Studio IDE interface. The title bar reads "File Edit View Project Build Debug Test Analyze Tools Extensions Window Help Search (Ctrl+Q) AzureFunctions". The toolbar includes icons for Back, Forward, Home, Refresh, and various project management tools. The status bar at the bottom shows "116 %", "No issues found", "Ln: 20 Ch: 1 SPC CRLF", and "Solution Explorer Team Explorer".

The main area is the code editor, displaying the file "GetItems.cs" under the namespace "AzureFunctions". The code defines a static class "GetItems" with a single method "Run". The method is annotated with "[FunctionName("GetItems")]". It takes an "HttpRequest" and an "ILogger" as parameters. Inside the method, it logs an information message, retrieves the query string parameter "name", reads the request body as a dynamic object, and then returns an OkObjectResult with a response message. A large red "X" is drawn across the entire code block.

The "Solution Explorer" pane on the right lists the project structure:

- Solution 'AzureFunctions' (1 of 1 project)
  - Dependencies
  - Properties
    - .gitignore
  - C# GetItem.cs
  - C# GetItems.cs
  - host.json
  - local.settings.json
  - C# SaveItem.cs

The "Properties" pane is also visible on the far right.

The bottom navigation bar includes "Package Manager Console", "Error List", "Output", "Web Publish Activity", "C# Interactive (64-bit)", "Test Explorer", "Ready", "EPN Sverige AB", and "LEXICON".

File Edit View Project Build Debug Test Analyze Tools Extensions Window Help Search (Ctrl+Q) AzureFunctions

Live Share

GetItems.cs

C# AzureFunctions

```
9  using Newtonsoft.Json;
10 using System.Collections.Generic;
11
12 namespace AzureFunctions
13 {
14     public static class GetItems
15     {
16         [FunctionName("GetItems")]
17         public static async Task<IActionResult> Run(
18             [HttpTrigger(AuthorizationLevel.Function, "get", Route = null)] HttpRequest req,
19             [CosmosDB(
20                 databaseName: "CosmosDatabase",
21                 collectionName: "ProductCatalog",
22                 ConnectionStringSetting = "CosmosConnection",
23                 CreateIfNotExists = true,
24                 SqlQuery = "SELECT * FROM c"
25             )] IEnumerable<dynamic> cosmosdb,
26             ILogger log)
27         {
28             if (cosmosdb == null)
29             {
30                 log.LogInformation($"Requested items not found");
31                 return new NotFoundResult();
32             }
33
34             log.LogInformation($"Requested items found");
35             return new OkObjectResult(cosmosdb);
36         }
37     }
38 }
```

Solution Explorer

Search Solution Explorer (Ctrl+F)

- Solution 'AzureFunctions' (1 of 1 project)
  - Dependencies
  - Properties
    - .gitignore
  - GetItem.cs
  - GetItems.cs
  - host.json
  - local.settings.json
  - Savetem.cs

Properties

Toolbox

Server Explorer

Ln: 39 Ch: 1 SPC CRLF

Solution Explorer Team Explorer

Package Manager Console Error List Output Web Publish Activity C# Interactive (64-bit) Test Explorer

Ready

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unique-cosmosdb-name | Keys - + https://portal.azure.com/#@bb6877e5-fd24-4945-ac2a-1745a4f34911/resource/subscriptions/a994b64b-6d0f-4f8a-b383-4ed1e... 5 ... Microsoft Azure Search resources, services, and docs (G+/) Dashboard > Azure Cosmos DB > unique-cosmosdb-name | Keys Azure Cosmos DB account Search (Ctrl+ /) Overview Activity log Access control (IAM) Tags Diagnose and solve problems Quick start Notifications Data Explorer Read-write Keys Read-only Keys URI https://unique-cosmosdb-name.documents.azure.com:443/ PRIMARY KEY nfhoDTHIzeZ4GEgugZCLMp7w6AWz2DJmFpilm7lqRKsLMeLByMDIMCDkCqhPhPhgpWVJ4fc1nFjljKbjMgK0nw== SECONDARY KEY FwuRdP6x7xU7gLUCNVHGb1wri8UdSMeEDbCSaXZRStrMosjZjrLAZsr0fXUo2Nx1grFcifaQglwRyX8BSpUbBg== PRIMARY CONNECTION STRING AccountEndpoint=https://unique-cosmosdb-name.documents.azure.com:443/;AccountKey=nfhoDTHIzeZ4GEgugZCLMp7w6AWz2DJmFpilm7lqRKsLMeLByMDIMCDkCqhPhPhgpWVJ4fc1nFjljK... Copy to clipboard SECONDARY CONNECTION STRING AccountEndpoint=https://unique-cosmosdb-name.documents.azure.com:443/;AccountKey=FwuRdP6x7xU7gLUCNVHGb1wri8UdSMeEDbCSaXZRStrMosjZjrLAZsr0fXUo2Nx1grFcifaQglwRyX8BS... Features Replicate data globally Default consistency Firewall and virtual networks Private Endpoint Connections CORS Keys Add Azure Cognitive Search

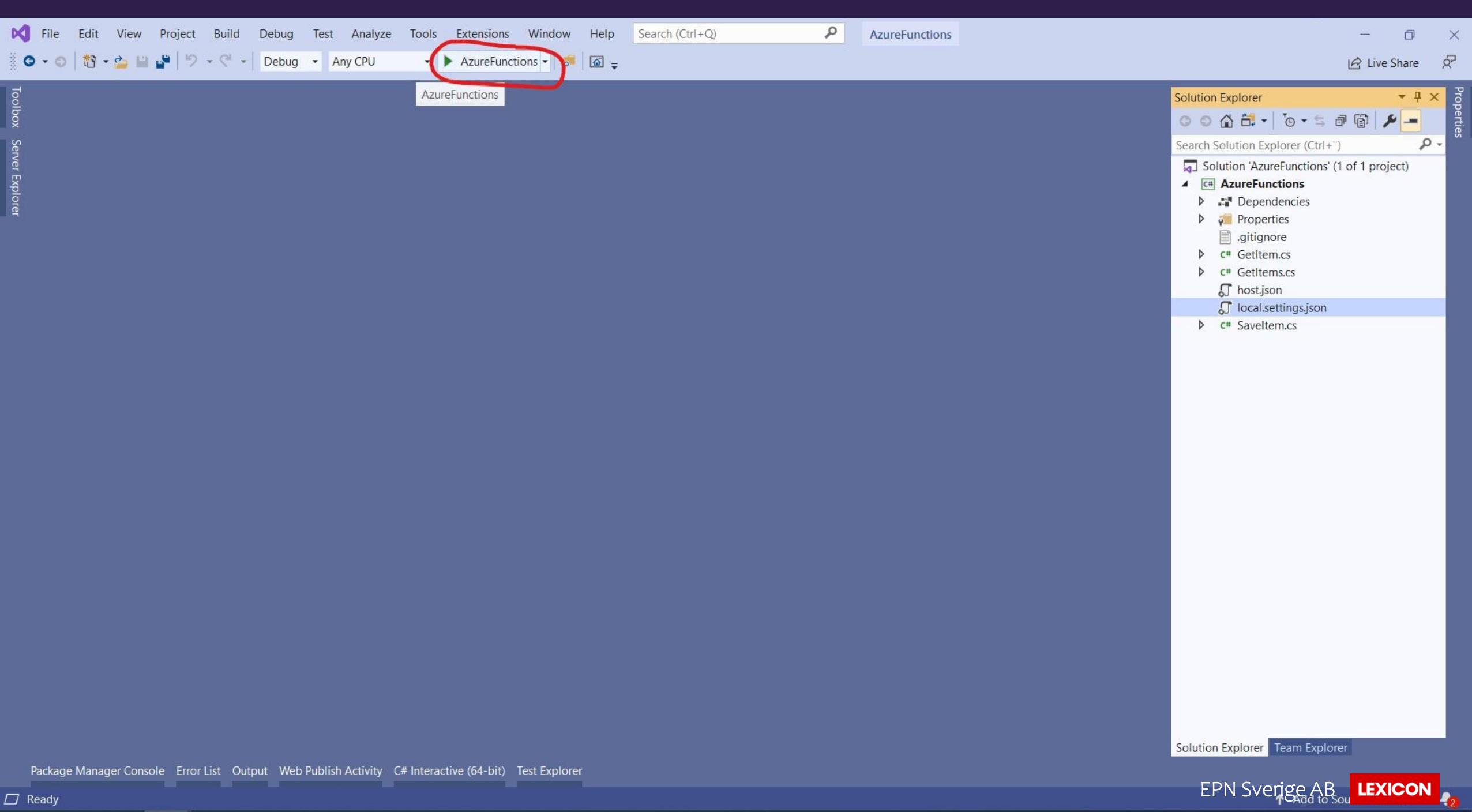
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The screenshot shows the Microsoft Visual Studio IDE interface. The main window displays the `local.settings.json` file in the code editor. The file contains configuration settings for Azure Functions, including storage and database connections. A red arrow points from the bottom of the code editor area towards the Solution Explorer pane.

```
1 {  
2     "IsEncrypted": false,  
3     "Values": {  
4         "AzureWebJobsStorage": "DefaultEndpointsProtocol=https;AccountName=storageaccountrgroup190;AccountKey=HhRtnRUAkVdK0kihI4uUe  
5         \"FUNCTIONS_WORKER_RUNTIME\": \"dotnet\",  
6         \"CosmosConnection\": \"AccountEndpoint=https://unique-cosmosdb-name.documents.azure.com:443/;AccountKey=nfhoDTHlzeZ4GEgugZCLM  
7     }  
8 }
```

The Solution Explorer pane on the right lists the project files. The `local.settings.json` file is highlighted with a red circle, indicating it is selected or the focus of the screenshot. Other files listed include `host.json`, `Dependencies`, `Properties`, `.gitignore`, `GetItem.cs`, `GetItems.cs`, and `SaveItem.cs`.

At the bottom of the screen, the status bar shows the zoom level (116%), issue count (No issues found), and file details (Ln: 8 Ch: 2 SPC CRLF). The bottom navigation bar includes links for Package Manager Console, Error List, Output, Web Publish Activity, C# Interactive (64-bit), Test Explorer, Solution Explorer, Team Explorer, and a ready indicator.



```
C:\Users\HansMatti-Lassei\AppData\Local\AzureFunctionsTools\Releases\3.7.0\cli_x64\func.exe
[        ]
[        ] Initializing function HTTP routes
[        ] Mapped function route 'api/GetItem' [get] to 'GetItem'
[        ] Mapped function route 'api/GetItems' [get] to 'GetItems'[
em' [post] to 'SaveItem'
[        ]
[        ] Host initialized (242ms)
[        ] Host started (254ms)
[        ] Job host started
Hosting environment: Production
Content root path:
Now listening on: http://0.0.0.0:7071
Application started. Press Ctrl+C to shut down.

Http Functions:

    GetItem: [GET] http://localhost:7071/api/GetItem
    GetItems: [GET] http://localhost:7071/api/GetItems
    SaveItem: [POST] http://localhost:7071/api/SaveItem
[        ] Host lock lease acquired by instance ID '00000000000000000000000000000009D0FBAAS'.
```

[New](#) [Import](#) [Runner](#) [...](#)

My Workspace

Invite



Sign In

POST http://localhost:7071/api/Save... [+](#) [...](#)

No Environment

Comments 0

Untitled Request

POST

http://localhost:7071/api/Saveltem

Send

Save

Params Authorization Headers (9) **Body** Pre-request Script Tests Settings Cookies Code none  form-data  x-www-form-urlencoded raw  binary  GraphQL

JSON

Beautify

```
1 {  
2   "artNr": "5011177709",  
3   "vendor": "Dell",  
4   "name": "EMC PowerEdge R240",  
5   "info": "Xeon Fyrkärnig 8GB",  
6   "price": 6995  
7 }
```

Response



[New](#) [Import](#) [Runner](#) [+](#)

My Workspace

Invite

POST http://localhost:7071/api/Save... [+](#) [...](#)

No Environment



## Untitled Request

Comments 0

POST

http://localhost:7071/api/Saveltem

Send

Save

Params Authorization Headers (9) **Body** Pre-request Script Tests Settings

Cookies Code

 none  form-data  x-www-form-urlencoded raw  binary  GraphQL

JSON

Beautify

```
1 {  
2   "artNr": "5011177709",  
3   "vendor": "Dell",  
4   "name": "EMC PowerEdge R240",  
5   "info": "Xeon Fyrkärnig 8GB",  
6   "price": 6995  
7 }
```

Body Cookies Headers (3) Test Results

Status: 200 OK Time: 7.29 s Size: 92 B Save Response

Pretty Raw Preview Visualize Text

1



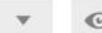
[New](#) [Import](#) [Runner](#) [+](#) [...](#)

My Workspace

Invite

POST http://localhost:7071/api/Save... [+](#) [...](#)

No Environment



Comments 0



Untitled Request

POST

http://localhost:7071/api/Saveltem

Send



Cookies Code

Params Authorization Headers (9) Body Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL JSON

```
1 {
2   "artNr": "5011142100",
3   "vendor": "Aruba",
4   "name": "Instant On AP11 Accesspunkt",
5   "info": "Enkel och effektiv WiFi för små företag",
6   "price": 795
7 }
```

Beautify



Body Cookies Headers (3) Test Results Status: 200 OK Time: 7.29 s Size: 92 B Save Response



Pretty Raw Preview Visualize Text



1

[New](#) [Import](#) [Runner](#) [+](#)

My Workspace

Invite



POST http://localhost:7071/api/Save...

GET http://localhost:7071/api/Getite...

+

...

No Environment



## Untitled Request

GET

http://localhost:7071/api/GetItems

Send

Save

[Params](#) [Authorization](#) [Headers \(7\)](#) [Body](#) [Pre-request Script](#) [Tests](#) [Settings](#)[Cookies](#) [Code](#)

## Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
Key	Value	Description		

## Response



Hit Send to get a response



[New](#) [Import](#) [Runner](#) [+](#)[My Workspace](#)[Invite](#)

POST http://localhost:7071/api/Save...

GET http://localhost:7071/api/Getite...

+

...

No Environment



GET

http://localhost:7071/api/GetItems

Send

Save

Pretty Raw Preview Visualize JSON



```
1 [  
2 {  
3     "artNr": "5011177709",  
4     "vendor": "Dell",  
5     "name": "EMC PowerEdge R240",  
6     "info": "Xeon Fyrkärnig 8GB",  
7     "price": 6995,  
8     "id": "db9f3e4b-894f-4768-a457-10f9a9130db6",  
9     "_rid": "nVFOAMfpzAQAAAAAAAAAA==",  
10    "_self": "dbs/nVFOAA==/colls/nVFOAMfpzAQ=/docs/nVFOAMfpzAQAAAAAAAAAA==/",  
11    "_etag": "\"1300ee0b-0000-0d00-0000-5f067a770000\"",  
12    "_attachments": "attachments/",  
13    "_ts": 1594260087  
14 },  
15 {  
16     "artNr": "5011142100",  
17     "vendor": "Aruba",  
18     "name": "Instant On AP11 Accesspunkt",  
19     "info": "Enkel och effektiv WiFi för små företag",  
20     "price": 795,  
21     "id": "eaf3a31b-5218-4611-bf80-60d52a49c251",  
22     "_rid": "nVFOAMfpzAQAAAAAAAAAA==",  
23     "_self": "dbs/nVFOAA==/colls/nVFOAMfpzAQ=/docs/nVFOAMfpzAQAAAAAAAAAA==/",  
24     "_etag": "\"13006413-0000-0d00-0000-5f067bb40000\"",  
25     "_attachments": "attachments/",  
26     "_ts": 1594260404  
27 }]
```



[New](#) [Import](#) [Runner](#) [+](#)

My Workspace

Invite



POST http://localhost:7071/api/Save...

GET http://localhost:7071/api/Getite...

GET http://localhost:7071/api/Getite...

+

...

No Environment



Untitled Request

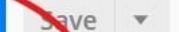


GET

http://localhost:7071/api/GetItem?id=eaf3a31b-5218-4611-bf80-60d52a49c251

Send

Save

Params ● Authorization Headers (7) Body Pre-request Script Tests Settings

Cookies Code

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
<input checked="" type="checkbox"/> id	eaf3a31b-5218-4611-bf80-60d52a49c251			
Key	Value	Description		

Body Cookies Headers (4) Test Results

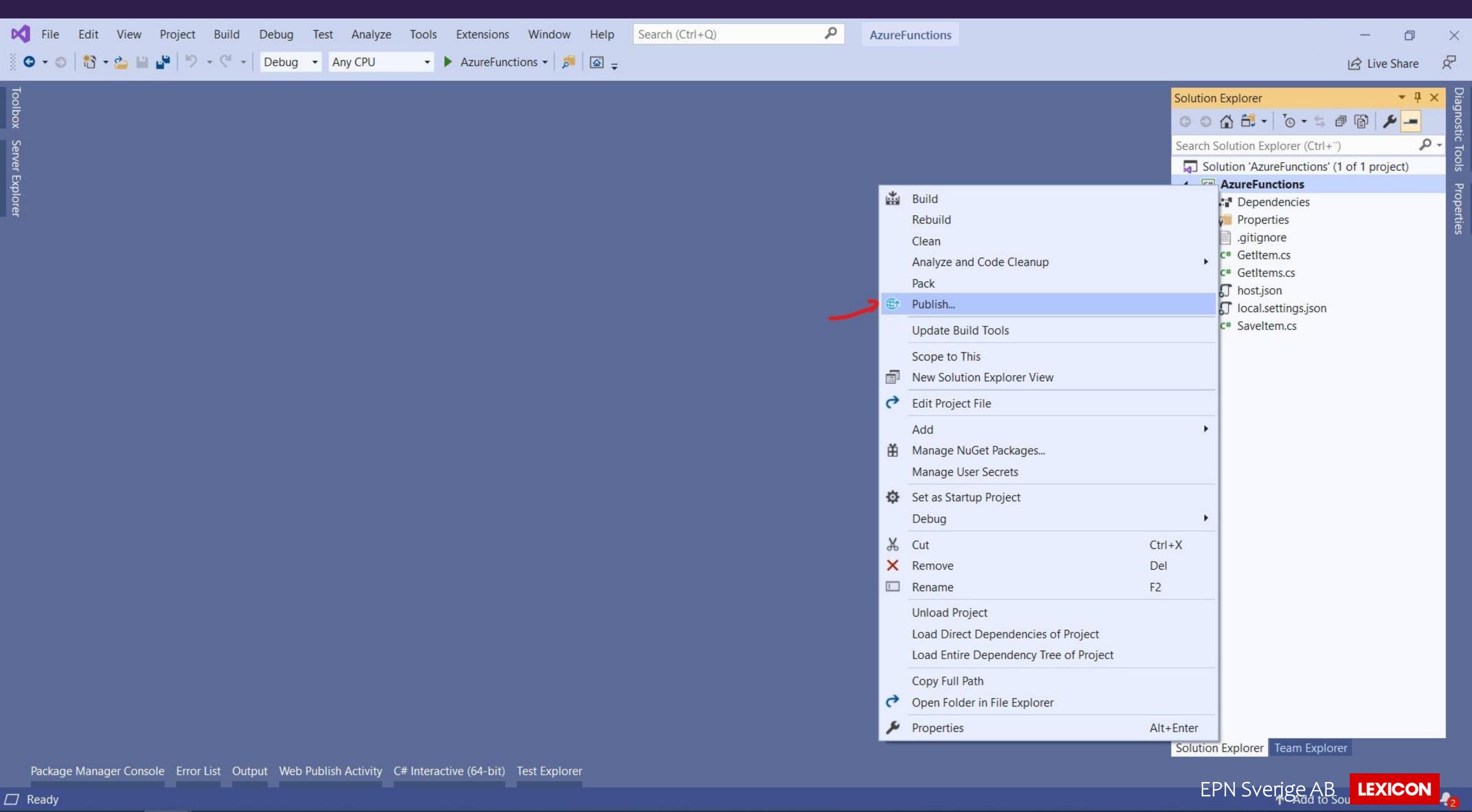
Status: 200 OK Time: 193 ms Size: 500 B Save Response

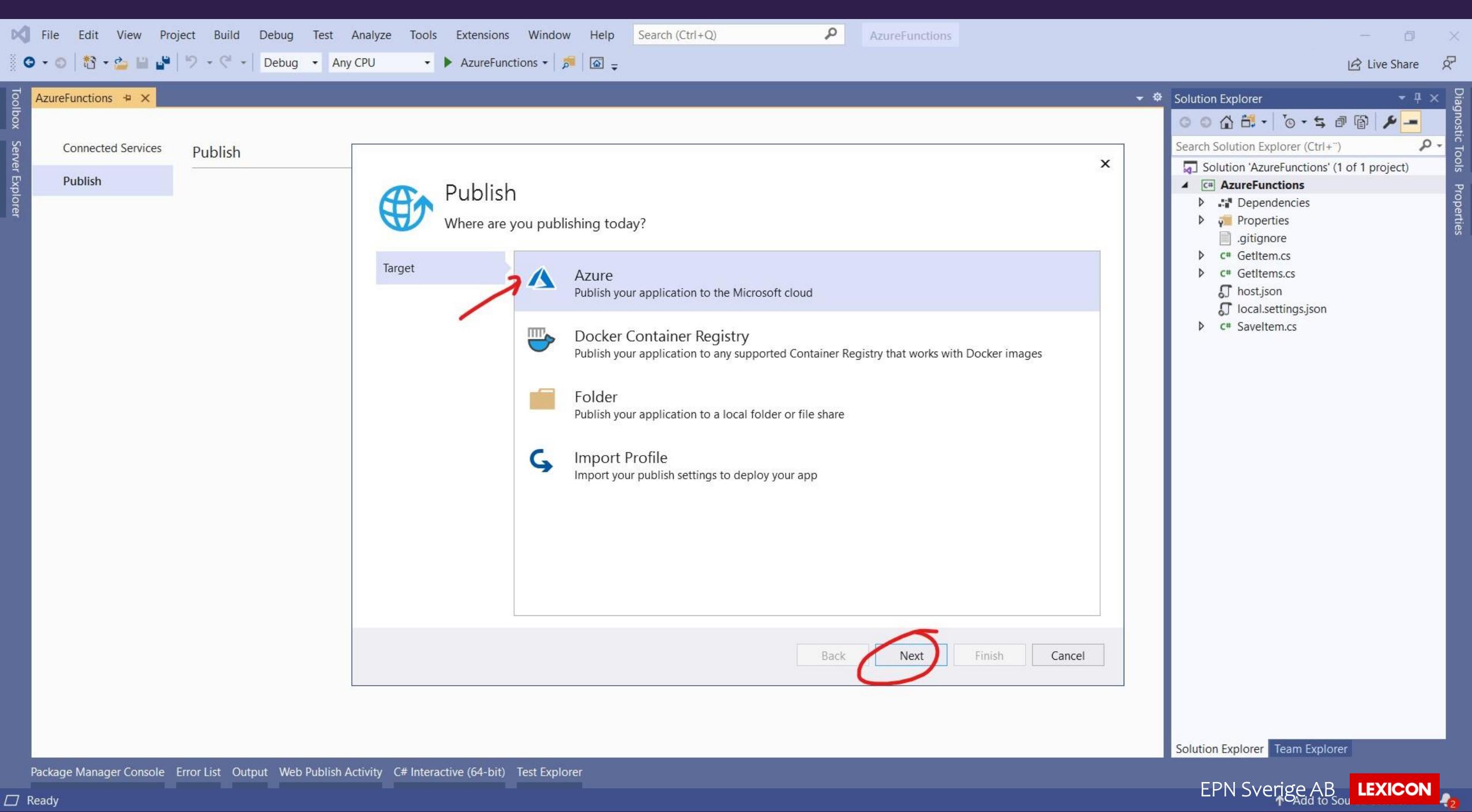
Pretty Raw Preview Visualize JSON



```
1 {  
2     "id": "eaf3a31b-5218-4611-bf80-60d52a49c251",  
3     "_rid": "nVFOAMfpzAQCAAAAAAAA==",  
4     "_self": "dbs/nVFOAA==/colls/nVFOAMfpzAQ=/docs/nVFOAMfpzAQCAAAAAAAA==/",  
5     "_ts": 1594260404,  
6     "_etag": "\"13006413-0000-0d00-0000-5f067bb40000\"",  
7     "artNr": "5011142100",  
8     "vendor": "Aruba",  
9     "name": "Instant On AP11 Accesspunkt",  
10    "info": "Enkel och effektiv WiFi för små företag",  
11    "price": 795  
12 }
```

1





AzureFunctions

Connected Services Publish

Publish

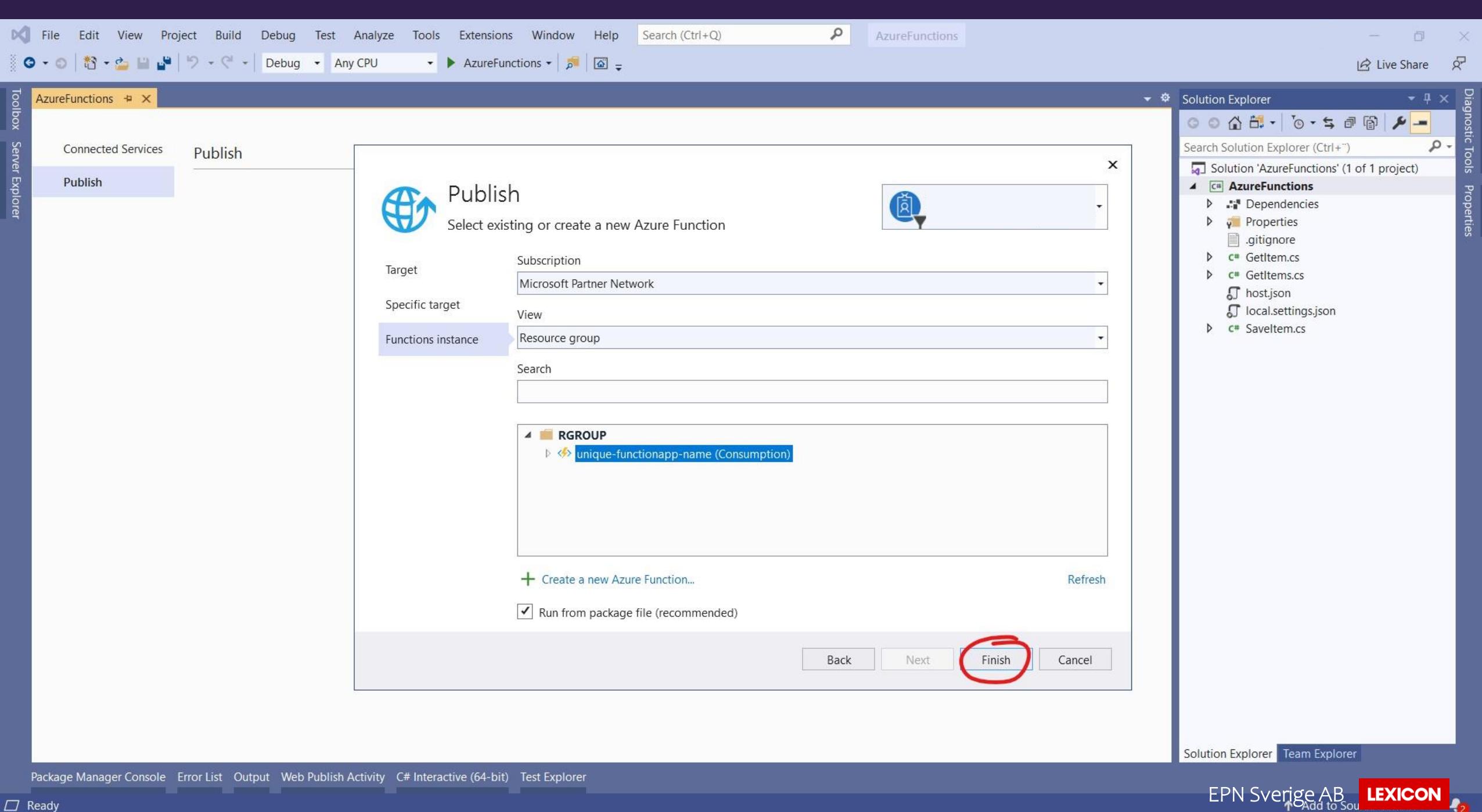
Which Azure service would you like to use to host your application?

Target Specific target

-  Azure Function App (Windows)  
Publish your application code to a serverless compute that scales dynamically and runs code on-demand...
-  Azure Function App (Linux)  
Publish your application code to a serverless compute that scales dynamically and runs code on-demand...
-  Azure Function App Container  
Publish your application as a Docker image to Azure Container Registry and run it on Azure Function...
-  Azure Container Registry  
Publish your application as a Docker image to Azure Container Registry

Back Next Finish Cancel

Solution Explorer Team Explorer



Screenshot of the Microsoft Visual Studio IDE interface showing the Publish tab for an Azure Functions project.

The main window displays the "Publish" tab under "Connected Services". A dropdown menu shows a single entry: "unique-functionapp-name - Zip Deploy". To the right of the dropdown is a "Publish" button. Below the dropdown, there are links for "New", "Edit", "Rename", and "Delete".

The "Summary" section contains the following details:

- Site URL: <http://unique-functionapp-name.azurewebsites.net>
- Configuration: Release
- Username: \$unique-functionapp-name
- Password: \*\*\*\*\*

The "Actions" section provides links for managing the app service:

- Manage in Cloud Explorer
- Manage Azure App Service settings
- Manage in Azure portal
- View streaming logs

The "Service Dependencies" section lists a dependency on "Storage" with the connection string name "AzureWebJobsStorage".

A red circle highlights the "Configure" link next to the "Storage" dependency entry.

The "Solution Explorer" pane on the right shows the project structure for "AzureFunctions":

- Dependencies
- Properties
  - .gitignore
  - GetItem.cs
  - GetItems.cs
  - host.json
  - local.settings.json
  - SaveItem.cs

The status bar at the bottom shows tabs for Package Manager Console, Error List, Output, Web Publish Activity, C# Interactive (64-bit), Test Explorer, Solution Explorer, and Team Explorer. The "Ready" status is also indicated.

AzureFunctions

Connected Services

**Publish**

Deploy your app to a folder, IIS

unique-functionapp-name

New Edit Rename Delete

Summary

Site URL

Configuration

Username

Password

Service Dependencies

Storage

Connection string name: A

Configure dependency

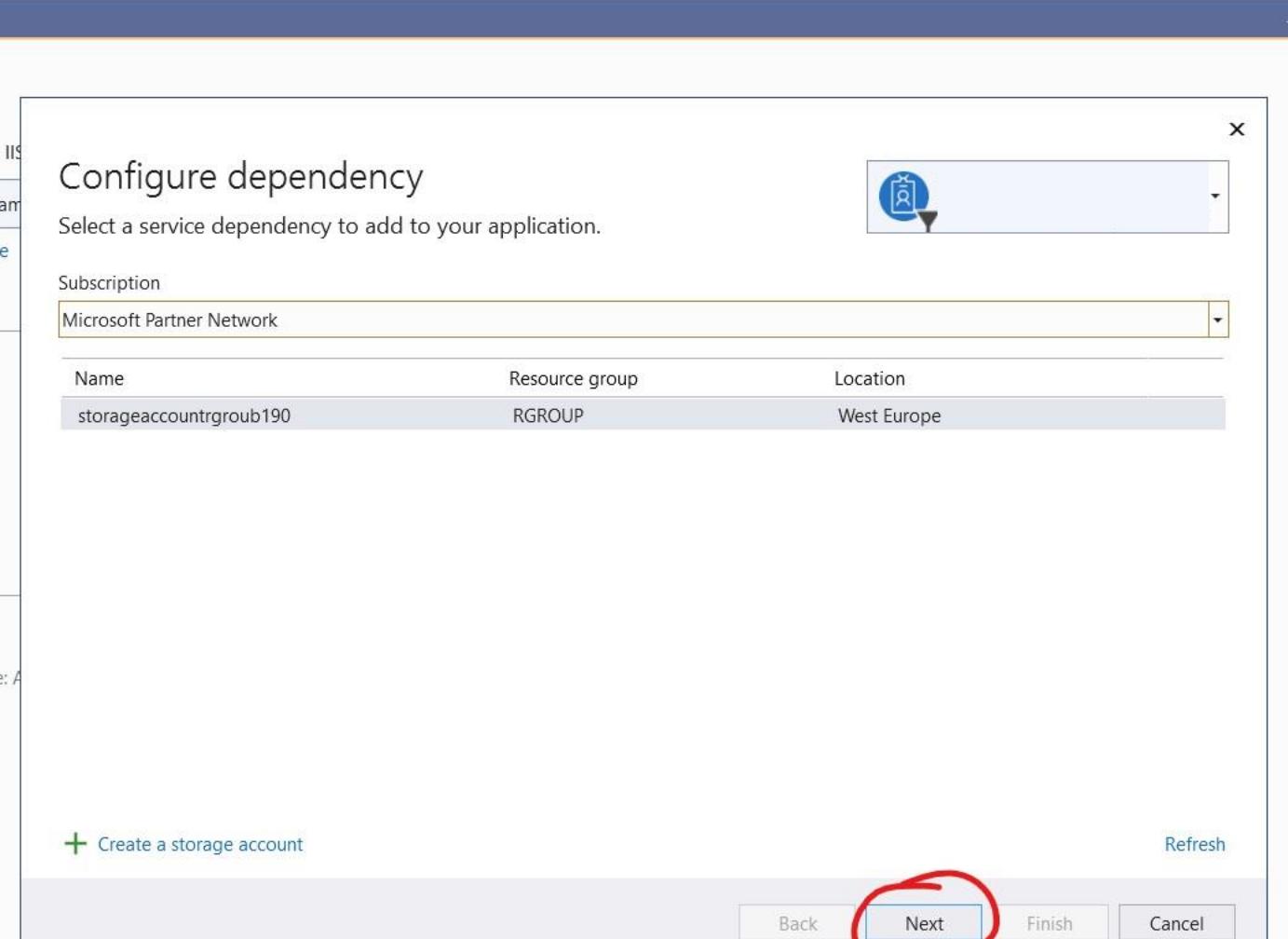
Select a service dependency to add to your application.

Subscription: Microsoft Partner Network

Name	Resource group	Location
storageaccountrgroup190	RGROUP	West Europe

+ Create a storage account Refresh

Back Next Finish Cancel



Solution Explorer

Search Solution Explorer (Ctrl+Shift+F)

Solution 'AzureFunctions' (1 of 1 project)

C# AzureFunctions

- Dependencies
- Properties
- .gitignore
- GetItem.cs
- GetItems.cs
- host.json
- local.settings.json
- SaveItem.cs

Diagnostic Tools Properties

Solution Explorer Team Explorer

The left sidebar contains "Toolbox" and "Server Explorer". The "Server Explorer" pane shows the project "AzureFunctions" with items like "Dependencies", "Properties", ".gitignore", "GetItem.cs", "GetItems.cs", "host.json", "local.settings.json", and "SaveItem.cs".

The central area displays the "Publish" dialog box for "unique-functionapp-name". The "Publish" tab is selected. The "Configure dependency" step is shown, with the connection string name set to "AzureWebJobsStorage". The "Connection string value" field is redacted with asterisks. A tip message says: "Tip: avoid pasting application secrets directly into your code." Below, there are three radio button options: "Azure App Settings" (selected), "Azure Key Vault", and "None".

At the bottom of the dialog are buttons: "Back", "Next", "Finish" (circled in red), and "Cancel".

Solution Explorer | Team Explorer

Screenshot of the Microsoft Visual Studio IDE interface showing the Publish tab for an Azure Functions project.

The main window displays the "Publish" tab under "Connected Services". A dropdown menu shows a single entry: "unique-functionapp-name - Zip Deploy". To the right of the dropdown is a "Publish" button.

The "Actions" section contains several links:

- Manage in Cloud Explorer
- Manage Azure App Service settings** (this link is circled in red)
- Manage in Azure portal
- View streaming logs

The "Service Dependencies" section lists a dependency on "Azure Storage: storageaccountrgroub190" with a connection string name "AzureWebJobsStorage". It shows a status of "Configured" with a green checkmark icon.

The "Solution Explorer" pane on the right shows the project structure for "AzureFunctions":

- Dependencies
- Properties
  - .gitignore
  - GetItem.cs
  - GetItems.cs
  - host.json
  - local.settings.json
  - SaveItem.cs

The bottom navigation bar includes links for Package Manager Console, Error List, Output, Web Publish Activity, C# Interactive (64-bit), Test Explorer, Solution Explorer, Team Explorer, and a status message "Ready".

Bottom right corner: EPN Sverige AB and LEXICON.

Screenshot of the Microsoft Visual Studio IDE showing the "Application settings" dialog for an Azure Functions project.

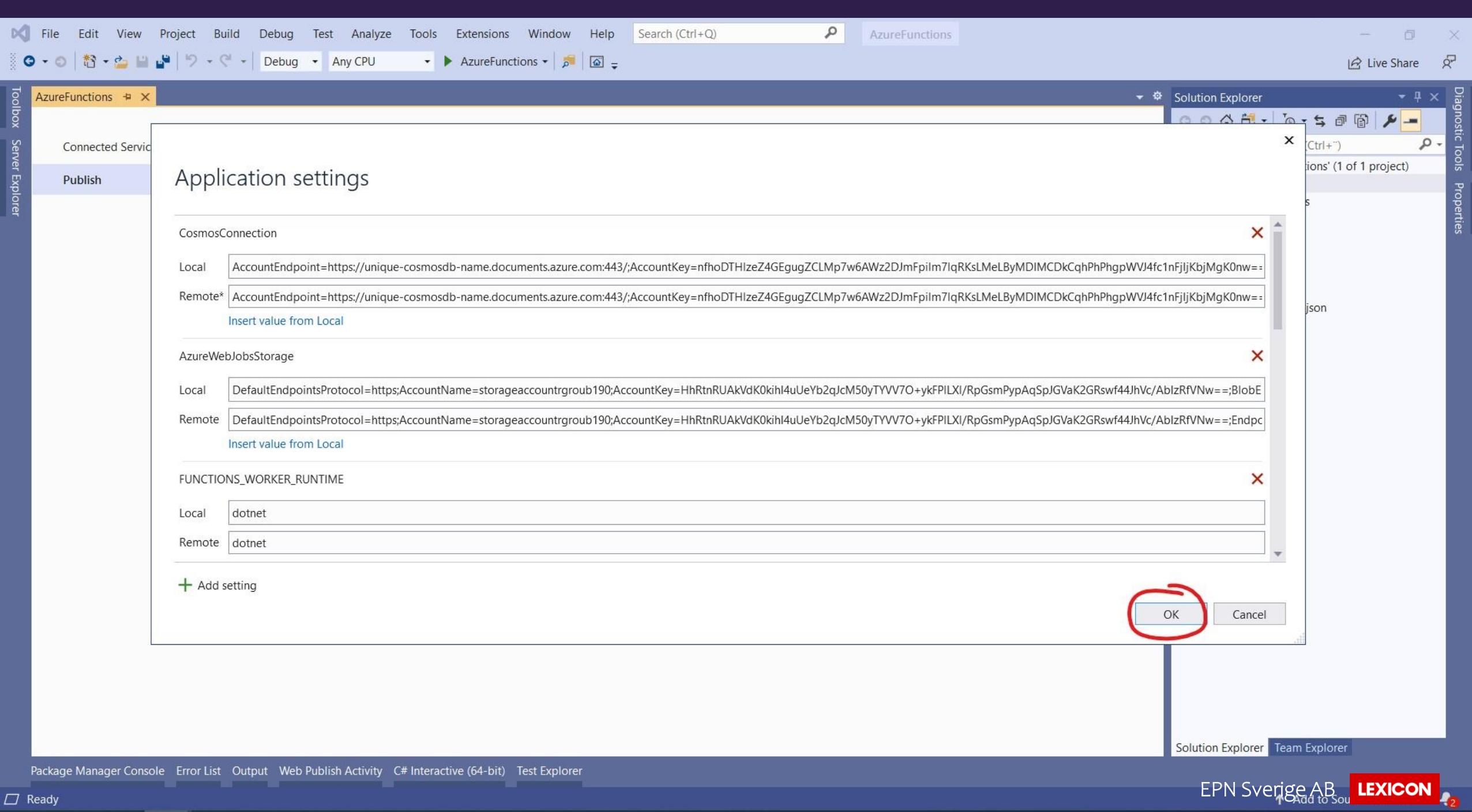
The dialog is titled "Application settings" and contains three sections:

- CosmosConnection**:
  - Local: AccountEndpoint=https://unique-cosmosdb-name.documents.azure.com:443/;AccountKey=nfhoDTHIzeZ4GEugugZCLMp7w6AWz2DJmFpilm7lqRKsLMeLByMDIMCDkCqhPhPhgpWVJ4fc1nFjljKbjMgK0nw==
  - Remote: [Empty input field] **Insert value from Local**
- AzureWebJobsStorage**:
  - Local: DefaultEndpointsProtocol=https;AccountName=storageaccountrgroup190;AccountKey=HhRtnRUAkVdK0kihl4uUeYb2qJcM50yTYVV7O+ykFPILXI/RpGsmPypAqSpJGVaK2GRswf44JhVc/AbIzRfVNw==;BlobEndpoint=https://storageaccountrgroup190.blob.core.windows.net/;QueueEndpoint=https://storageaccountrgroup190.queue.core.windows.net/;TableEndpoint=https://storageaccountrgroup190.table.core.windows.net/
  - Remote: DefaultEndpointsProtocol=https;AccountName=storageaccountrgroup190;AccountKey=HhRtnRUAkVdK0kihl4uUeYb2qJcM50yTYVV7O+ykFPILXI/RpGsmPypAqSpJGVaK2GRswf44JhVc/AbIzRfVNw==;EndpointSuffix=core.chinacloudapi.cn
  - Insert value from Local**
- FUNCTIONS\_WORKER\_RUNTIME**:
  - Local: dotnet
  - Remote: dotnet

At the bottom left is a green **+ Add setting** button. At the bottom right are **OK** and **Cancel** buttons.

The Visual Studio interface includes the following elements:

- File, Edit, View, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help menus at the top.
- Search bar: Search (Ctrl+Q) with a magnifying glass icon.
- Toolbox and Server Explorer toolbars on the left.
- Solution Explorer, Diagnostic Tools, Properties toolbars on the right.
- Package Manager Console, Error List, Output, Web Publish Activity, C# Interactive (64-bit), Test Explorer tabs at the bottom.
- Solution Explorer and Team Explorer buttons at the bottom right.
- EPN Sverige AB and LEXICON logos at the bottom right.



Screenshot of the Microsoft Visual Studio IDE interface showing the Publish tab for an Azure Functions project.

The main window displays the "Publish" tab under "Connected Services". A red circle highlights the "Publish" button in the top right corner of the publish configuration list.

**Publish**

Deploy your app to a folder, IIS, Azure, or another destination. [More info](#)

unique-functionapp-name - Zip Deploy

New Edit Rename Delete

**Summary**

Site URL	http://unique-functionapp-name.azurewebsites.net
Configuration	Release
Username	\$unique-functionapp-name
Password	*****

**Actions**

- Manage in Cloud Explorer
- Manage Azure App Service settings
- Manage in Azure portal
- View streaming logs

**Service Dependencies**

Azure Storage: storageaccountrgroub190	Configured	...
--	------------	-----

Connection string name: AzureWebJobsStorage

**Solution Explorer**

Search Solution Explorer (Ctrl+Shift+F)

- Solution 'AzureFunctions' (1 of 1 project)
  - Dependencies
  - Properties
  - .gitignore
  - GetItem.cs
  - GetItems.cs
  - host.json
  - local.settings.json
  - SaveItem.cs

**Toolbox**

**Server Explorer**

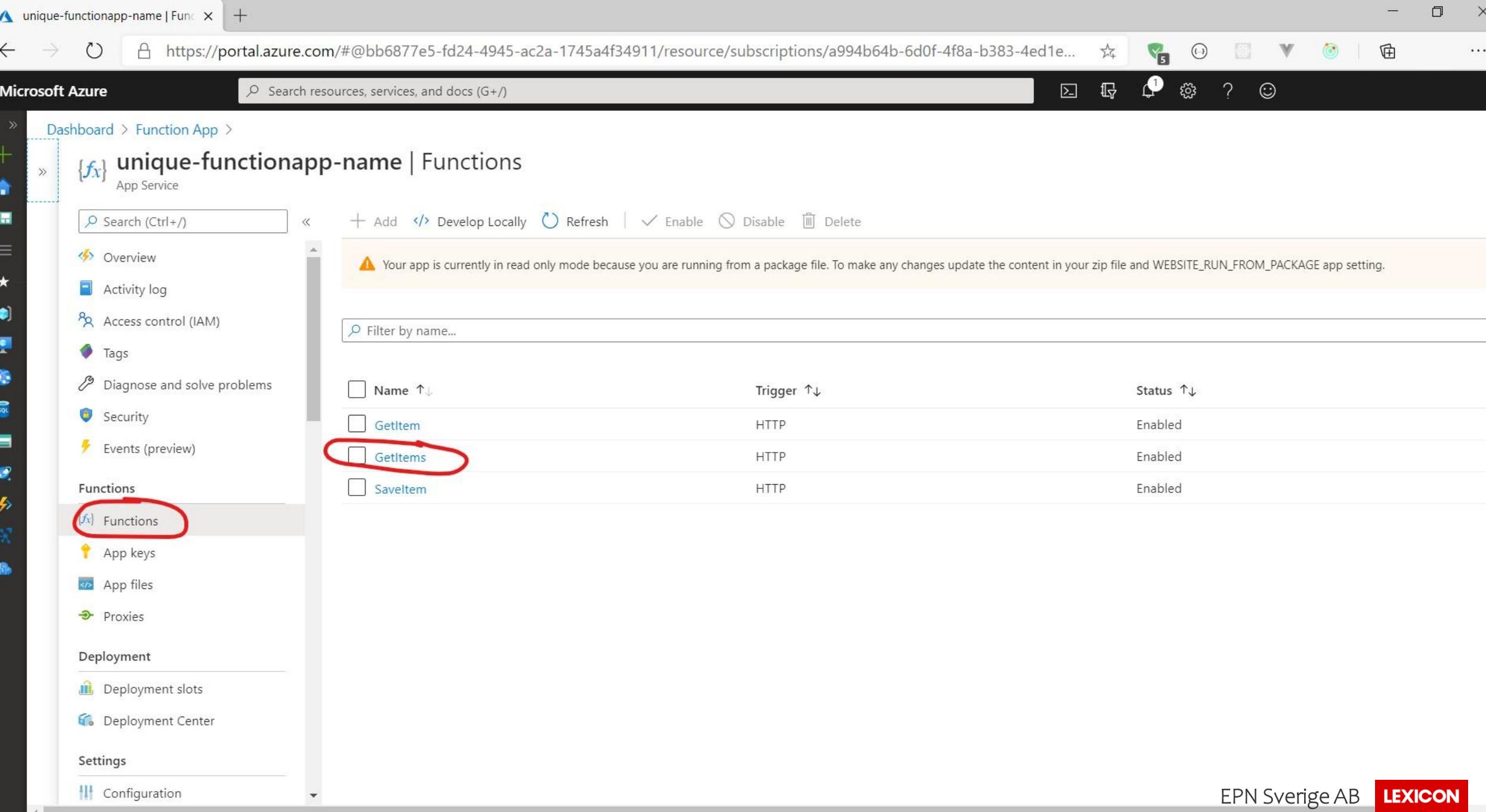
**Diagnostic Tools Properties**

**Package Manager Console Error List Output Web Publish Activity C# Interactive (64-bit) Test Explorer**

**Solution Explorer Team Explorer**

**EPN Sverige AB Add to Sou LEXICON**

Ready





## GetItems

Function

 Search (Ctrl+ /)

Enable

Disable



Get Function Url

Refresh

### Overview

#### Developer

Code + Test

Integration

Monitor

Function Keys

### Get Function Url

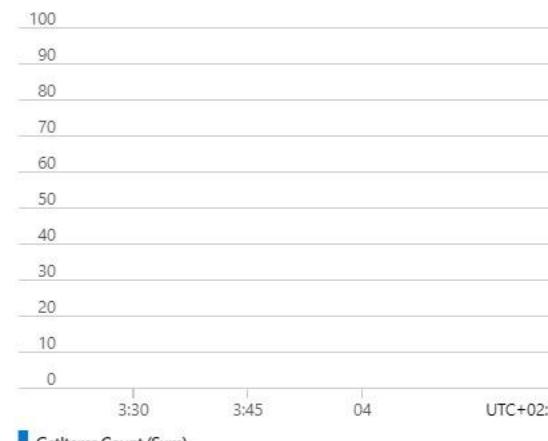
default (function key)

unique-functionapp-name.azurewebsites.net/api/GetItems?code=ie5MZiluiAP4hg3TM9XBl/iuS3/X...

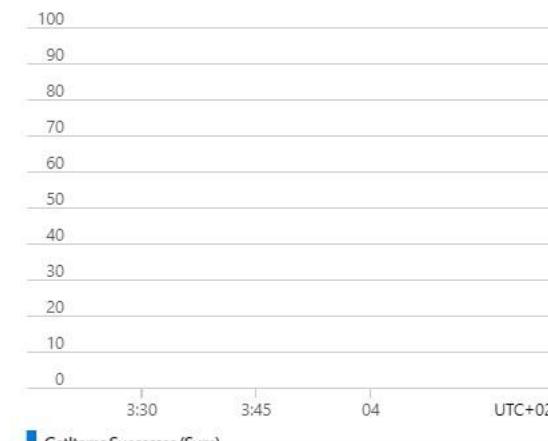
Copy to clipboard

OK

### Total Execution Count



### Successful Execution Count



POST http://localhost:7071/api/Save... ● GET http://localhost:7071/api/Getite... ● GET http://localhost:7071/api/Getite... ● GET https://unique-functionapp-na... ● + ... No Environment

GET https://unique-functionapp-name.azurewebsites.net/api/GetItems?code=ie5MZiluiAP4hg3TM9XBl/iuS3/XKhf2IQzyWxUE1vpN0mfh1LeZMw==

**Send**

Save

key

value

Description

Body Cookies (1) Headers (8) Test Results

Status: 200 OK Time: 1817 ms Size: 1.07 KB Save Response

Pretty Raw Preview Visualize JSON



```
1 [
2 {
3     "artNr": "5011177709",
4     "vendor": "Dell",
5     "name": "EMC PowerEdge R240",
6     "info": "Xeon Fyrkärnig 8GB",
7     "price": 6995,
8     "id": "db9f3e4b-894f-4768-a457-10f9a9130db6",
9     "_rid": "nVFOAMfpzAQAAAAAAAAAA==",
10    "_self": "dbs/nVFOAA==/colls/nVFOAMfpzAQ=/docs/nVFOAMfpzAQAAAAAAAAAA==/",
11    "_etag": "\"1300ee0b-0000-0d00-0000-5f067a770000\"",
12    "_attachments": "attachments/",
13    "_ts": 1594260087
14 },
15 {
16     "artNr": "5011142100",
17     "vendor": "Aruba",
18     "name": "Instant On AP11 Accesspunkt",
19     "info": "Enkel och effektiv WiFi för små företag",
20     "price": 795,
21     "id": "eaf3a31b-5218-4611-bf80-60d52a49c251",
22     "_rid": "nVFOAMfpzAQCAAAAAAAA==",
23     "_self": "dbs/nVFOAA==/colls/nVFOAMfpzAQ=/docs/nVFOAMfpzAQCAAAAAAAA==/",
24     "_etag": "\"13006413-0000-0d00-0000-5f067bb40000\"",
25     "_attachments": "attachments/",
26     "_ts": 1594260404
```